

# SEQUENCE LISTING

<110> Virca, Duke  
Bird, Timothy A.  
Anderson, Dirk M.  
Marken, John S.

<120> Human cDNAs Encoding Polypeptides Having Kinase Functions

<130> 2877-US

<160> 16

<170> PatentIn Ver. 2.0

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<213> Homo sapiens

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Gln Ala Pro Phe Leu Val Thr Leu His Tyr Ala Phe Gln Thr Asp Ala
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Lys Leu His Leu Ile Leu Asp Tyr Val Ser Gly Gly
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Ile Ile His Arg Asp Leu Cys Leu Glu Asn Leu Leu Leu Val His Cys
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His	Val	Ala	Arg	Pro	Thr	Glu	Val	Leu	Ala	Gly	Thr	Gln	Leu	Leu	Tyr
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Val	Leu	Glu	Asn	Leu	Glu	Asp	Ser	Cys	Val	Leu	Thr	Gly	Pro	Asp	Asp
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Leu	Ser	Ser	Arg	Ala	Ser	Tyr	Ser	Gly	Lys	Ala	Ala	Asp	Val	Trp	Ser
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Ala Leu Pro Ala Gly Leu Ser Ala Pro Ala Arg Cys Leu Val Arg Cys				
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Leu Leu Arg Arg Glu Pro Ala Glu Arg Leu Thr Ala Thr Gly Ile Leu				
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Leu His Pro Trp Leu Arg Gln Asp				
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 Glu Arg Leu Lys Asp Lys Gly Asn Phe Leu Thr Glu Asp Gln Ile Leu  
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 Trp Leu Leu Leu Gly Ile Cys Arg Gly Leu Glu Ala Ile His Ala Lys  
 65 70 75 80  
 Gly Tyr Ala Tyr Arg Asp Leu Lys Pro Thr Asn Ile Leu Leu Gly Asp  
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 Glu Gly Gln Pro Val Leu Met Asp Leu Gly Ser Met Asn Gln Ala Cys  
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Pro	Val	Ser	Pro	Ile	Ser	Gln	Gly	Ala	Ser	Trp	Ala	Gln	Glu	Asp	Gln	165	170	175	
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Glu	Ile	Lys	Glu	Thr	Leu	Arg	Gln	Tyr	Leu	Pro	Pro	Lys	Cys	Met	Gln	210	215	220	
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Arg	Gly	Leu	Tyr	Arg	Leu	His	His	Ser	Glu	Ala	Pro	Glu	Leu	His	Gly
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 Pro Asn Glu Pro Glu Gly Gly Asp Lys Ser Arg Lys Ser Ala Lys Gly  
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 Asp Lys Gly Gly Lys Asp Lys Lys Gln Ile Gln Thr Ser Pro Val Pro  
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 85 90 95  
 Ser Tyr Ser Pro Tyr Ala Phe Lys Phe Phe Met Glu Gln His Val Glu

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		370					375				380						
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385					390					395					400		
Gly	Val	Ile	Leu	Phe	Glu	Met	Leu	Val	Gly	Gln	Pro	Pro	Phe	Leu	Ala		
				405					410					415			
Pro	Thr	Pro	Thr	Glu	Thr	Gln	Leu	Lys	Val	Ile	Asn	Trp	Glu	Asn	Thr		
			420					425					430				



Leu His Ile Pro Ala Gln Val Lys Leu Ser Pro Glu Ala Arg Asp Leu  
435 440 445

Ile Thr Lys Leu Cys Cys Ser Ala Asp His Arg Leu Gly Arg Asn Gly  
450 455 460

Ala Asp Asp Leu Lys Ala His Pro Phe Phe Ser Ala Ile Asp Phe Ser  
465 470 475 480

Ser Asp Ile Arg Lys His Pro Ala Pro Tyr Val Pro Thr Ile Ser His  
485 490 495

Pro Met Glu

<210> 13  
<211> 375  
<212> DNA  
<213> Homo sapiens

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tatcaatatg atgtaaagtc tgaaatatac agcttttgga tgcctcctctg ggaaatcgcc 180  
actggagata tcccgtttca aggctgtaat tctgagaaga tccgcaagct ggtggctgtg 240  
aagcggcagc aggagccact ggggtgaagac tgcccttcag agctgcggga gatcattgat 300  
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<210> 14  
<211> 125  
<212> PRT  
<213> Homo sapiens

<400> 14  
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Thr Thr Arg Glu Lys Thr Asp Arg Val Lys Ser Thr Ala Tyr Leu Ser  
20 25 30  
Pro Gln Glu Leu Glu Asp Val Phe Tyr Gln Tyr Asp Val Lys Ser Glu  
35 40 45  
Ile Tyr Ser Phe Gly Ile Val Leu Trp Glu Ile Ala Thr Gly Asp Ile  
50 55 60  
Pro Phe Gln Gly Cys Asn Ser Glu Lys Ile Arg Lys Leu Val Ala Val  
65 70 75 80  
Lys Arg Gln Gln Glu Pro Leu Gly Glu Asp Cys Pro Ser Glu Leu Arg  
85 90 95  
Glu Ile Ile Asp Glu Cys Arg Ala His Asp Pro Ser Val Arg Pro Ser  
100 105 110  
Val Asp Glu Ile Leu Lys Lys Leu Ser Thr Phe Ser Lys  
115 120 125

<210> 15  
 <211> 1961  
 <212> DNA  
 <213> Homo sapiens

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 gcgccaaggg ggacaaaggc ggaaaggata aaaagcagat tcagacctct cccgttcccc 240  
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 acgcctttta gttcttcatg gagcagcacg tggagaatgt catcaaaaacc taccagcaga 360  
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 agcaggagca gatgcggaag atcctctacc agaaagagtc taattacaac aggttaaaga 480  
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 gagaagtgtg ccttgcttgt aagggtggaca ctcacgccct gtacgccatg aagaccctaa 600  
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 tggccgaggg agacaatgag tgggtggtca aactctacta ctcttccaa gacaaagaca 720  
 gcctgtactt tgtgatggac tacatccctg gtgggggacat gatgagcctg ctgatccgga 780  
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 gagtgattct ctteagagatg ctggtggggc agccgccctt tttggcacct actcccacag 1260  
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 cgaatttcga ccccgtagat gaagaaagcc cttggaacga tgccagcgaa ggtagcacca 1560  
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<210> 16  
 <211> 588  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Asn Glu Pro Glu Gly Gly Asp Lys Ser Arg Lys Ser Ala Lys Gly Asp  
 50 55 60  
 Lys Gly Gly Lys Asp Lys Lys Gln Ile Gln Thr Ser Pro Val Pro Val

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Arg	Lys	Asn	Ser	Arg	Asp	Glu	Glu	Lys	Arg	Glu	Ser	Arg	Ile	Lys	Ser			
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Tyr	Ser	Pro	Tyr	Ala	Phe	Lys	Phe	Phe	Met	Glu	Gln	His	Val	Glu	Asn			
			100					105					110					
Val	Ile	Lys	Thr	Tyr	Gln	Gln	Lys	Val	Asn	Arg	Arg	Leu	Gln	Leu	Glu			
		115					120					125						
Gln	Glu	Met	Ala	Lys	Ala	Gly	Leu	Cys	Glu	Ala	Glu	Gln	Glu	Gln	Met			
	130					135					140							
Arg	Lys	Ile	Leu	Tyr	Gln	Lys	Glu	Ser	Asn	Tyr	Asn	Arg	Leu	Lys	Arg			
145					150					155					160			
Ala	Lys	Met	Asp	Lys	Ser	Met	Phe	Val	Lys	Ile	Lys	Thr	Leu	Gly	Ile			
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Gly	Ala	Phe	Gly	Glu	Val	Cys	Leu	Ala	Cys	Lys	Val	Asp	Thr	His	Ala			
			180					185					190					
Leu	Tyr	Ala	Met	Lys	Thr	Leu	Arg	Lys	Lys	Asp	Val	Leu	Asn	Arg	Asn			
		195					200					205						
Gln	Val	Ala	His	Val	Lys	Ala	Glu	Arg	Asp	Ile	Leu	Ala	Glu	Ala	Asp			
	210					215					220							
Asn	Glu	Trp	Val	Val	Lys	Leu	Tyr	Tyr	Ser	Phe	Gln	Asp	Lys	Asp	Ser			
225					230					235					240			
Leu	Tyr	Phe	Val	Met	Asp	Tyr	Ile	Pro	Gly	Gly	Asp	Met	Met	Ser	Leu			
				245					250					255				
Leu	Ile	Arg	Met	Glu	Val	Phe	Pro	Glu	His	Leu	Ala	Arg	Phe	Tyr	Ile			
			260					265					270					
Ala	Glu	Leu	Thr	Leu	Ala	Ile	Glu	Ser	Val	His	Lys	Met	Gly	Phe	Ile			
		275					280					285						
His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Ile	Leu	Ile	Asp	Leu	Asp	Gly	His			
	290					295					300							
Ile	Lys	Leu	Thr	Asp	Phe	Gly	Leu	Cys	Thr	Gly	Phe	Arg	Trp	Thr	His			
305					310					315					320			
Asn	Ser	Lys	Tyr	Tyr	Gln	Lys	Gly	Ser	His	Val	Arg	Gln	Asp	Ser	Met			
				325					330					335				
Glu	Pro	Ser	Asp	Leu	Trp	Asp	Asp	Val	Ser	Asn	Cys	Arg	Cys	Gly	Asp			
			340					345					350					
Arg	Leu	Lys	Thr	Leu	Glu	Gln	Arg	Ala	Arg	Lys	Gln	His	Gln	Arg	Cys			
		355					360					365						
Leu	Ala	His	Ser	Leu	Val	Gly	Thr	Pro	Asn	Tyr	Ile	Ala	Pro	Glu	Val			
	370					375					380							
Leu	Leu	Arg	Lys	Gly	Tyr	Thr	Gln	Leu	Cys	Asp	Trp	Trp	Ser	Val	Gly			
385					390					395					400			

Val	Ile	Leu	Phe	Glu	Met	Leu	Val	Gly	Gln	Pro	Pro	Phe	Leu	Ala	Pro	405	410	415	
Thr	Pro	Thr	Glu	Thr	Gln	Leu	Lys	Val	Ile	Asn	Trp	Glu	Asn	Thr	Leu	420	425	430	
His	Ile	Pro	Ala	Gln	Val	Lys	Leu	Ser	Pro	Glu	Ala	Arg	Asp	Leu	Ile	435	440	445	
Thr	Lys	Leu	Cys	Cys	Ser	Ala	Asp	His	Arg	Leu	Gly	Arg	Asn	Gly	Ala	450	455	460	
Asp	Asp	Leu	Lys	Ala	His	Pro	Phe	Phe	Ser	Ala	Ile	Asp	Phe	Ser	Ser	465	470	475	480
Asp	Ile	Arg	Lys	His	Pro	Ala	Pro	Tyr	Val	Pro	Thr	Ile	Ser	His	Pro	485	490	495	
Met	Asp	Thr	Ser	Asn	Phe	Asp	Pro	Val	Asp	Glu	Glu	Ser	Pro	Trp	Asn	500	505	510	
Asp	Ala	Ser	Glu	Gly	Ser	Thr	Lys	Ala	Trp	Asp	Thr	Leu	Thr	Ser	Pro	515	520	525	
Asn	Asn	Lys	His	Pro	Glu	His	Ala	Phe	Tyr	Glu	Phe	Thr	Phe	Arg	Arg	530	535	540	
Phe	Phe	Asp	Asp	Asn	Gly	Tyr	Pro	Phe	Arg	Cys	Pro	Lys	Pro	Ser	Gly	545	550	555	560
Ala	Glu	Ala	Ser	Gln	Ala	Glu	Ser	Ser	Asp	Leu	Glu	Ser	Ser	Asp	Leu	565	570	575	
Val	Asp	Gln	Thr	Glu	Gly	Cys	Gln	Pro	Val	Tyr	Val	580	585						